DRAFT

NATIONAL SPENT NUCLEAR FUEL PROGRAM
April 13-14, 2005
Bethesda, MD

AGENDA

Wednesday, April 13

8:30	Introductions	Mark Gardner, NSNFP
8:45	Repository Design Overview	Steve Clark, RW
9:20	EM SNF/HLW Activities	Cynthia V. Anderson, EM
9:30	License Application Status	Bill Hutchins, BSC
10:15	National Spent Nuclear Fuel Program Direction	Mark Gardner, NSNFP
10:30	**Break**	
11:00	Site SNF Progress/Activities	
11:00	Hanford	Sen Moy, DOE-RL
11:15	SRS	Randy Ponik, DOE-SR
11:30	INL	Joe Pruitt, BBWI
12:00	**Lunch**	
1:30	SNF/HLW Repository Acceptance	Steve Gomberg, RW
2:00	Vision for Supporting HLW	Phil Wheatley, NSNFP
2:20	HEU Returns	Ed Fujita, ANL
2:30	**Break**	
3:00	Quality Assurance, EM Perspective	Larry Vaughn, EM
3:30	Quality Assurance	Ram Murthy, RW
4:00	**Adjourn**	

Thursday, April 14

8:30	Opening Remarks	Mark Gardner, NSNFP
8:35	EM SNF, DOE HQ Perspective - Acceptance Schedule Current status of CPT - Packaging Plans, EM planning case - FRR receipts - SRS Processing - Acceptance of NE SNF - Integrated	Christine Gelles, EM
9:25	NE Planning for SNF Disposition - Interim Storage - Packaging	Andy Griffith, NE
9:35	NE/MFC	Jim Werner, DOE-NE
9:50	**Break**	
10:15	Site HLW Progress/Activities *(Focus discussion on HLW issues, qualification of new glass waste forms, etc.)*	
	Hanford	DOE-ORD (no representative)
10:15	SRS	Tom Gutmann, DOE-SR
10:45	INL	Jim Beck, BBWI
11:25	West Valley	Denis Koutsandreas, DOE EM
11:51	Canister Drop Testing Update	Tom Hill, NSNFP
12:15	Closeout	Mark Gardner, NSNFP
12:30	**Adjourn**	

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NSNFP MEETING SUMMARY
WEDNESDAY, APRIL 13, 2005

The information below represents discussion highlights or questions raised during the presentations. Copies of the presentations will be available electronically on the NSNFP Web page after May 15, 2005, at http://nsnfp.inel.gov/program.

Welcome/Introductions (No presentation)
Mark Gardner, DOE-NSNFP

- Mark Gardner, DOE NSNFP Manager, welcomed the participants to the NSNFP Meeting and initiated introductions of the attendees.

Repository Design Overview
Steve Clark, RW

- There are some preliminary data that indicate the backup diesel and battery power may be necessary if we go to an inert environment (due to the concern of fuel particles in the air). These slides do not reflect the current design evolutions. If the backup power falls within Category 2, then it would be ITS.
- The commercial fuel will be loaded into a Site-specific Canister onsite; the canister lid will be welded; it will be placed into a site-specific cask; the lid will be bolted; and the cask will be placed onto the aging pad. And then after appropriate aging, the site-specific canister will be removed from the cask and placed into a Waste Package (WP). The DPC won't necessarily have the same capacity as the WP. Some staging is necessary to optimize loading in the WP.
- There is no aging planned for DOE-SNF, but there may be a staging need.
- The capacity for the transfer cask is different than for the WP. When the WP is loaded to capacity, it may exceed the thermal capacity requirement of 11.8 for Yucca Mountain. So aging helps reduce the total WP decay heat to acceptable limits.
- There is enough older commercial SNF in the schedule that will allow loading of the drift. But we really don't know what will be received on the schedule yet.

Opening Remarks
Cynthia V. Anderson, EM - Office of Federal Disposition Options

- Look at the issues in the matrix and let Cynthia know if there are others.
- Item #18 applies to the goal to integrate the SNF and HLW programs. The NSNFP provides a coordination role for SNF and some extent to HLW with review of the LA. We think the NSNFP is a centralized resource and could extend support to the HLW program as needed. The NSNFP also has a funding source. The NSNFP meeting

in October 2005 will include the HLW program issues. We are looking at ways to integrate both programs. We want to be an advocate for the field to address issues and want to increase HLW focus.

License Application Status

Bill Hutchins, BSC, Manager of Criticality

- There are about 150 or so (+/- 10%) Analysis Model Reports (AMRs) supporting the License Application.
- With regard to the IG audit of the USGS data, we are planning for License Application submittal in September 2005. We are working on an effort to regain the confidence in the data.
- The resolution of the 10,000 year regulatory period may change some of the analysis. The probability to determine criticality would still be based on what we know today. The only one that may change is the modeling for TSPA. We are moving forward based on the 10,000 years, but we are unsure of the impacts.
- There should be a high level draft due out this summer to resolve the 10,000 year issue. The ACNW has been discussing the issue and they are considering a meeting this summer to discuss the schedule for resolution.

National Spent Nuclear Fuel Program Direction

Mark Gardner, DOE NSNFP

The NSNFP will remain funded by EM as part of the President's budget.

Mark reviewed the Action Items from the last meeting held in Las Vegas in October 2004.

#	Action Item – October 2004	Designee	Status
1	Find out what actions the DOE sites have taken on the QARD Revision 17 (HLW-sites)	DOE – HQ / QA	We are integrated pretty well.
2	Collect the QA related documents and ensure they are circulated to the sites for review. Work with Larry Vaughn.	NSNFP – QA/ Don Armour	Complete
3	Identify the NE POC that should also receive the QA documents for review.	DOE QA/ Bob Torro	Remains open.
4	Schedule a follow on video conference with Ned Larson to discuss the transportation issues. Involve HLW as well. Invite Ned Larson to the next NSNFP Meeting in Washington DC.	NSNFP	Meeting Scheduled Friday, April 15.
5	Dialog with HQ to reestablish the strategy for transportation.	NSNFP	See Action #4.
6	Interface with the NRC about questions	NSNFP	Complete

#	Action Item – October 2004	Designee	Status
	regarding pedigree and participation in quarterly meetings. *Status as of April 2005: Met with NRC in January and Ned Larson facilitated meeting. We had an extended conversation where Tom about how the standard canister can help with the YMP licensing strategy. There will be a follow on meeting with the NRC and one of the major issues is availability of information on transportation. DOE-HQ has questions about the type of information that exists at the site.*		
7	Provide the EPRI report on the effectiveness of the cold drying process to Eric Woolstenhulme.	Brett Carlsen	Open.
8	Send the specifications on the 10-year-old interim storage cask to Guy Martin.	Roger McCormack	Complete. However, the spec was not appropriate.
9	Send information to Denis Koutsandreas on the current use of the SRS PCT and how much the PEER process will increase throughput.	Jim Werner	Complete.

- Issue #1: Update the Integrated Acceptance Schedule. In the next few months, the LA will be updated. The LA should not definitively preclude the MCOs. Also, the LA should not preclude the staging of DOE SNF at YMP. DOE-SNF can be staged on trucks. DOE-SNF is needed for thermal loading. There is not much staging space available at the sites for DOE-SNF. This could impact how much SNF we can start packaging and sending offsite. We recommend that the LA should say that DOE staging is an option.

  This would impact HLW as well. If RW puts half of the commercial SNF into aging, then the equivalent amount will need to be staged or held back at the DOE facilities. This impacts our transportation. Impacts costs at the site. This could be about 2/3 of our fuel.

Site SNF Progress/Activities: Hanford

DOE-RL (Sen Moy)

- The reclamation of the 300 Area is being done by PNNL and is not part of the Hanford SNF Project. Everything has been classified as RH-TRU so it will be sent to the Central Waste Complex. The big pieces of SNF have already been moved.

- Hanford has been working very actively with the NSNFP on survivability drop tests and the input and review of the analysis the NSNFP has prepared for transportability of the short stack MCOs. Hanford has been reviewing all MCO documentation in draft form prior to issuance.

Site SNF Progress/Activities: Savannah River Site
Randy Ponik

- The Global Threat Reduction Initiative would expand our FRR program. SRS may be required to take a FRR shipment in 2006, if Idaho closes it borders to fuel receipts.

- The disposition path for Non-US origin SNF would require changes to the NWPA, since the act only allows domestic or US origin fuel to be sent to YMP.

Site SNF Progress/Activities: INL SNF Program
Joe Pruitt

- The 2012 date to close FAST 666 is part of the State of Idaho Settlement Agreement, however this is for EM-SNF. The Navy will continue to use FAST after 2012.

- There is no non-DOE managed fuel at INTEC that we are aware of.

SNF/HLW Repository Acceptance
Steve Gomberg, RW

- Part 72 does not apply to YMP for the aging pad since you are not allowed to have a Part 72 and Part 63 facility in the same state. There are Part 72 casks that we could use because it is a pad (aging pad).

- There are heat limits for the WP based on meeting the thermal goals, which includes the rock wall, the WP, etc. This is how the heat limit was derived. It is between 350 and 400 degrees for cladding temperature and 400 degrees for the HLW.

- In addition to the 7000 MTHM allocation, DOE manages an allocation within the 63,000 MTHM for commercial fuel. The commercial fuel that DOE managers would be part of the commercial MTHM allocation.

Vision for Supporting HLW
Phil Wheatley (NSNFP)

- There are a number of HLW issues at the sites, such as fresh fuel, HLW, and MHLW. We had a general discussion with HQ on where we might be able to help. The NSNFP will likely be the method to get HLW and SNF qualified for disposal in YMP.

HEU Returns
Ed Fujita

- The RERTR program is part of the Global Threat Reduction Program.

- The initial focus is the 12,000 kg in the original agreement. The intent is to bring this SNF back to either Russia or the United States. The US has reactors all over the world as a result of The Atoms for Peace Programs of the 1950s. There are about 1500 countries. 5000 kg are eligible; 12,000 kg have not been addressed.

Quality Assurance, EM Perspective (No Presentation)
Larry Vaughn, EM

- Our biggest area of concern is dealing with the matrix and associated procedures. The QARD Matrix talks to the requirement for identifying each procedure.

- We don't have a good history of how the matrix was developed and approved, but we are trying to be more consistent.

- Another concern is the sites that are no longer doing work. What should the matrix look like today and then in the future?

- We don't want the procedures removed from the matrix because you are not operating, but we want to know what work is being done and is covered by the matrix.

- Looking at doing a tri-annual audit or something longer than a year for those sites that are no longer operating.

- We are looking at Atlanta lead glass at SRS. Will starting working with them to get their matrix in place.

- We are moving from the QARD Rev 17 (Rev F) to the WCQARS. The rev process is not applicable to the DOE sites. If a change is made to the QARD, Rev 17, RW will determine if it impacts the WCQARS, then we don't have to look at it at all.

- Transition from QARD to the WCQARS. Sites are working under different revisions of the QARD. How do we lesson the impact to moving to the WCQARS? Probably administrative updates.

- Implementing time frame for the Rev 17, QARD, September 2005.

Quality Assurance (Hard copy)
Carl Webber, RW – QA

- No comments

NSNFP MEETING SUMMARY
THURSDAY, APRIL 14, 2005

EM SNF, DOE HQ Perspective (No presentation)

Christine Gelles, EM

- The new focus for DOE-owned SNF and HLW will be to develop a national strategy for each major waste type. Cynthia Anderson will be refining this strategy and then will focus on implementation.

- EM will likely continue to receive fuels from other programs, but the funding issues have not been resolved. EM will need to work through them on a case-by-case basis.

- For FY 2007 planning, assume shipments to Yucca Mountain of DOE-owned SNF/HLW will begin in 2012. This is the earliest date. We asked each site to look at a 2012 start with a 3-year ramp up to full shipping. We also asked them for the impacts for a 5-year delay (2017) with full shipping in 2020.

- Idaho Settlement Agreement has a milestone to ship 6000 cm of waste out of RWMC by the end of December. EM is looking at possible contingencies.

- The CPT could not make the decision to retain TRIGA fuel at SRS without revising their RODs. The Melt and Dilute (M&D) process was the basis for the original concept of regionalized storage at SRS and INL. Without programmatic justification, the state of Georgia will not likely agree to accept more SNF just because Idaho can't.

- The H-Canyon at SRS will not be shutdown in 2007. Reprocessing makes some sense, but what to process has not been determined. This undermines the justification of why we need a repackaging facility.

- Last year, the SNF CPT had an approved CD-1, which included three packaging facilities; one at each site. We know we need to have packaging capability at Hanford. Since H-Canyon will remain operational, it may make sense to build a packaging facility at Idaho that will handle SRS and Idaho SNF.

- We need a start date for Yucca Mountain to evaluate the decisions for the three SNF sites. We can't refine our life cycle planning without the results from YMP.

- Foster Wheeler is revising their safety report, so a firm decision is not expected until after September 2005.

- If the repository opens and we are able to get into safe interim storage, then RW can assume responsibility with an expanded scope. If the repository does not get built in

the next 10 years, then EM will remain with a mission. We will look to divest ourselves of the facilities that support other programs, e.g. L-Basin and NNSA.

SNF Management Status
Andrew Griffith

- No comments.

SNF Treatment at MFC
Jim Werner

- The NE baseline is to ship the SNF to INTEC; package it into standard canisters in the new packaging facility; and store it there until it is shipped to the repository. Planning has not been completed on SNF transportation to INTEC.

SRS HLW Progress/Activities (No presentation)
Tom Gutmann, DOE-SR

- The Waste Disposition Project at SRS has oversight of the vitrification project. At this point in time, 1847 canisters have been filled with HLW glass. Of those, 1835 are in the Glass Waste Storage Building #1, which has a capacity of 2262 canisters.

- The Glass Waste Storage Building #2 is under construction. It is scheduled to be on-line when the first storage building is full. These facilities are collocated and both are at grade vaults.

- Both storage buildings together will not accommodate the total canister projection out of the DWPA. We still need the RW repository to accept the canisters on schedule so SRS can avoid further investment into facilities or additional canisters. If the repository does not open, a third storage building will be needed around 2015.

Issues

- Processing salt waste out of the tank farms. There are 24 million gallons of salt waste liquid and 1 million gallons of sludge. The sludge is presently going through the vitrification facility. We don't have a way to prepare the salt waste to go though the DWPF. We have 2 million gallons of available working space in our compliant tanks. We have enough tank storage space, but not enough for comfort. We want to get into the salt processing so we can reduce the volume of what we have in the tanks and increase our flexibility.

- The FY-05 NDAA (National Defense Authorization Act), Section 3116, was introduced by a SRS representative to address a problem that we were not able to resolve. The WIR determination process is a DOE internal process to regulate the HLW remaining in tanks that have been cleaned. This is Waste Incidental to Reprocessing and it allows DOE to immobilize waste in place. A lawsuit was filed, making the WIR unavailable. This Section

3116 will allow DOE to do essentially the same thing as the WIR; allow closure of the tanks. It will be done in consultation with the NRC at SRS. DOE may decide to proceed with closure of tanks under this authorization.

- Salt Process. DOE was tasked to construct a Salt Waste Process Facility to treat the greater amount of the Salt Waste. But we need to disposition the waste quicker than a new facility can come on board. The Liquification Dissolution and Adjustment Process (low curie salt), removes the cesium and leaves the salt with low activity. We can then dispose of this waste at SRS in the salt stone vaults. We need to have this in place by October 2005 (operational intent). We will make use of this process until the Salt Waste Facility is online.

- Studies and conceptual designs have been prepared for a shipping facility. SRS has not talked to the SNF program to look at a central shipping and receiving facility for both SNF and HLW, but the need for a SNF/HLW shipping and handling facility is recognized.

INL HLW – Calcine Disposition Project
Jim Beck, BBWI

- INEEL is working with Yucca Mountain is using the existing TSPA model for analysis. RW did not submit the YMP License Application in December, so they did not want INL to submit our "no migration" model. We have to move forward to meet the schedules that have been outlined for us.
- The settlement agreement with the State of Idaho says the INL will have the calcine "road ready." In the 1999 HLW EIS, DOE opted to have the state add a cooperating agency. DOE made a commitment to get a RCRA Part B permit while the waste is in storage and to get the waste out of the bin set.

West Valley D&D Operations (Hard Copy)
Denis Koutsandreas, DOE EM-HQ

- There is no disposal path for the DOE melters at West Valley (1), Hanford (2), and SRS (1 in D&D, 1 operational).

- West Valley did not collect lessons learned. No one at the site or HQ plans to collect the data on the D&D with the melter. The NSNFP should collect this data before the WV layoff in the summer.

MCO Canister
Tom Hill

No questions.

Closure
Mark Gardner

- Mark Gardner closed the meeting by asking the attendees for the issues that the NSNFP could help them with. The identified the following three:
  - Epoxy treatment
  - Gather lessons learned from the West Valley Melter D&D effort before the end of June.
  - Update the integrated acceptance schedule.

- The team agreed to keep the bi-monthly DOE HQ and HLW calls separate.

- The next NSNFP meeting will be scheduled in October 2005, and a request for issues to be addressed will be sent prior to the meeting.

- Dick Blaney thanked Mark Gardner, Phil Wheatley, and the NSNFP team for their support. DOE-HQ will continue to need the help from the field offices and visa versa. Cynthia Anderson will to work the issues list she presented. Dick Blaney asked everyone to please review the issues list to see what needs to added or removed and let HQ know. They need to be aware of the issues and impacts of SNF/HLW program direction. He said it is hard for EM to assemble a critical mass for HLW issues, but they can leverage off the contacts within the SNF program.

ACRONYMS

ACNW	Advisory Committee on Nuclear Waste
AMR	Analysis Modeling Report
ATR	Advanced Test Reactor
BBWI	Bechtel BWXT Inc.
BSC	Bechtel SAIC Company
BWR	Boiling Water Reactor
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CPT	Corporate Project Team
DOE	U.S. Department of Energy
DWPF	Defense Waste Processing Facility (SRS glassification facility)
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
FAST	Fluorinel Dissolution Process and Fuel Storage (INTEC)
FRR	Foreign Research Reactor
HLW	High Level Waste
INTEC	Idaho Nuclear Technology and Engineering Center
ITS	Important to Safety
ITWI	Important to Waste Isolation
LA	License Application (LA)
LCC	Life Cycle Cost
M&D	Melt & Dilute
MCO	Multipurpose Canister Overpack
MFC	Materials & Fuels Complex (Formerly ANL-W)
MHLW	Mixed High Level Waste
MTHM	Metric Tons of Heavy Metal
NDAA	National Defense Authorization Act
NFS	Nuclear Fuel Services, Inc.
NNSA	National Nuclear Security Administration
NRC	Nuclear Regulatory Commission
NSNFP	National Spent Nuclear Fuel Program
OCRWM or RW	Office of Civilian Radioactive Waste Management
OGC	Office of General Council (DOE)
PCT	Pressure Change Test
PEER	
POC	Point of Contact

QARD	Quality Assurance Requirements Document
RCRA	Resource Conservation and Recovery Act
RERTR	Reduced Enrichment Research and Test Reactor
RH TRU	Remote-Handled Transuranic (waste)
RIT	Regulatory Integration Teams
RWMC	Radioactive Waste Management Complex
SAR	Safety Analysis Report
SHADO	Small High Activity Debris Object
SNF	Spent Nuclear Fuel
SRS	Savannah River Site
SSCs	Systems, Structures, and Components
TQAP	Transportation Quality Assurance Plan
TSPA	Total System Performance Assessment
WAC	Waste Acceptance Criteria
WAP	Waste Acceptance Product Specification
WCQARS	Waste Custodian Quality Assurance Requirements Specification
WP	Waste Package (YMP)
YMP	Yucca Mountain Project